

## Zwitterionic Imides

### Abstract

Zwitterionic imide compounds are provided according to the formula:  $R_1-SO_2-$

- 5  $N^--SO_2-R_2^+$ , where  $R_1$  and  $R_2^+$  are any suitable groups. Typically  $R_1$  is a highly fluorinated alkane and  $R_2^+$  contains a quaternary ammonium group or a heteroatomic aromatic group having an cationic nitrogen, such as: pyridiniumyl, pyridaziniumyl, pyrimidiniumyl, pyraziniumyl, imidazoliumyl, pyrazoliumyl, thiazoliumyl, oxazoliumyl, or triazoliumyl. Zwitterionic liquids are provided, typically having
- 10 melting points of less than 100 °C and typically having a solubility in water of less than 5% by weight.

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